

## WHAT IS CLAIMED IS:

5 1. An audio transmitting apparatus comprising at least data transmitting means for sending out digital audio data and identification information showing the type of the digital audio data, wherein said data transmitting means issues silent identification information C showing transition period and nearly zero data, for a specified time of transition of said identification information from identification information A or identification information B to other identification information.

10 2. The audio transmitting apparatus of claim 1, wherein said identification information A shows linear PCM mode, and said identification information B shows nonlinear PCM mode.

15 3. The audio transmitting apparatus of claim 1, wherein the specified time of transition of said identification information from said identification information A to said identification information B ranges from 3 msec to hundreds of msec.

4. The audio transmitting apparatus of claim 1, wherein the data of said identification information A fades out immediately before transition.

5. The audio transmitting apparatus of claim 1, wherein the data of said identification information B fades in for a specified time after transition.

20 6. The audio transmitting apparatus of any one of claims 1 to 5, wherein the transmission route for sending out data is IEEE1394.

25 7. The audio transmitting apparatus of any one of claims 1 to 5, wherein the transmission route for sending out data is IEEE1394, and said silent identification information C is ancillary data specified in Audio and Music Data Transmission Protocol of the IEEE1394.

8. The audio transmitting apparatus of any one of claims 1 to 5, wherein the transmission route for sending out data is IEEE1394, and said silent identification information C has a specified data region, and said data region is "0" in a specified bit row at the MSB side.

5 9. An audio receiving apparatus comprising:

identification information distinguishing means for distinguishing the identification information of received data, and

means for selecting data processing depending on the output of said identification information distinguishing means, by issuing the digital audio data  
10 directly in the case of identification information A showing linear PCM mode, issuing through data decoding means in the case of identification information B showing nonlinear PCM mode, or selecting the output different from the case of the identification information before transition in the case of identification information C showing the transition period of transition from identification  
15 information A or identification information B to other identification information.

10. The audio receiving apparatus of claim 9, wherein the output is muted nearly to zero when said identification information C is detected depending on the output of said identification information distinguishing means.

11. The audio receiving apparatus of claim 9 or 10, wherein the  
20 transmission route for receiving data is IEEE1394.

12. The audio receiving apparatus of claim 9 or 10, wherein the transmission route for receiving data is IEEE1394, and said silent identification information C is ancillary data specified in Audio and Music Data Transmission Protocol of the IEEE1394.

25 13. The audio receiving apparatus of claim 9 or 10, wherein the

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transmission route for receiving data is IEEE1394, and said silent identification information C has a specified data region, and said data region is "0" in a specified bit row at the MSB side.

14. An audio transmitting apparatus comprising at least data  
5 transmitting means for sending out digital audio data and identification information showing the type of the digital audio data in a transmission route,

wherein said data transmitting means issues silent identification information C and information showing identification information A for a specified time T1 of transition from digital audio data of identification information A to  
10 digital audio data of identification information B.

15. An audio transmitting apparatus comprising at least data transmitting means for sending out digital audio data and identification information showing the type of the digital audio data in a transmission route,

wherein said data transmitting means issues silent identification  
15 information C and information showing identification information B for a specified time T2 of transition from digital audio data of identification information A to digital audio data of identification information B.

16. An audio transmitting apparatus comprising at least data transmitting means for sending out digital audio data and identification  
20 information showing the type of the digital audio data in a transmission route,

wherein said data transmitting means issues silent identification information C and information showing identification information A for a specified time T1 of transition from digital audio data of identification information A to digital audio data of identification information B, and further issues silent  
25 identification information C and information showing identification information B

for a specified time T2.

17. The audio transmitting apparatus of any one of claims 14 to 16, wherein one of said identification information A or identification information B shows non-encode mode, and others show encode mode.

5 18. The audio transmitting apparatus of claim 14 or 16, wherein said T1 is 3 msec or more.

19. The audio transmitting apparatus of of claim 15 or 16, wherein said T2 is 3 msec or more.

20. The audio transmitting apparatus of any one of claims 14 to 16, wherein the transmission route for sending out data is IEEE1394.  
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21. The audio transmitting apparatus of any one of claims 14 to 16, wherein the transmission route for sending out data is IEEE1394, and said silent identification information C is ancillary data specified in Audio and Music Data Transmission Protocol of the IEEE1394.

15 22. The audio transmitting apparatus of any one of claims 14 to 16, wherein when said identification information is said silent identification information C, sequentially different data are stored in a specified data region following said silent identification information C.

20 23. The audio transmitting apparatus of any one of claims 14 to 16, wherein when said identification information is said silent identification information C, sequentially different data are stored in a specified bit row at the LSB side in a specified data region following said silent identification information C.

25 24. The audio transmitting apparatus of any one of claims 14 to 16, wherein when said identification information is said silent identification

information C, pseudo-random number data are stored in a specified data region following said silent identification information C.

25. The audio transmitting apparatus of any one of claims 14 to 16, wherein when said identification information is said silent identification information C, pseudo-random number data are stored in a specified bit row at the LSB side in a specified data region following said silent identification information C.

26. An audio receiving apparatus comprising identification information distinguishing means for distinguishing the identification information showing the type of the data received through a transmission route,

wherein digital audio data is issued directly in the case of identification information showing non-encode mode, depending on the output of said identification information distinguishing means, or issued by way of data decoding means in the case of identification information showing encode mode, and

when said identification information distinguishing means distinguishes silent identification information C,

the output is immediately muted nearly to zero in the case of identification information showing the identification information before the silent identification information C is non-encode mode, or

the output is muted nearly to zero after termination of processing of the data in process by said data decoding means in the case of identification information showing the identification information before the silent identification information C is encode mode.

27. An audio receiving apparatus comprising identification information distinguishing means for distinguishing the identification information showing the

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type of the data received through a transmission route,

wherein digital audio data is issued directly in the case of identification information showing non-encode mode, depending on the output of said identification information distinguishing means, or issued by way of data decoding means in the case of identification information showing encode mode, and

when said identifier distinguishing means distinguishes silent identification information C,

the output is immediately muted nearly to zero in the case of identification information showing the identification information before the silent identification information C is non-encode mode, or

the output is muted nearly to zero after termination of processing of the data in process by said data decoding means in the case of identification information showing the identification information before the silent identification information C is encode mode,

thereby changing to the setting for data output depending on the identification information accompanying said silent identification information C in the midst of muting by said silent identification information C.

28. The audio receiving apparatus of claim 26 or 27, wherein the transmission route for receiving data is IEEE1394.

29. The audio receiving apparatus of claim 26 or 27, wherein the transmission route for receiving data is IEEE1394, and said silent identification information C is ancillary data specified in Audio and Music Data Transmission Protocol of the IEEE1394.

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